

## **REMARKS**

Claims 1-21 were pending at the time of the most recent Non-Final Office action (Mailed from the Patent Office on January 7, 2009). Claims 1-21 have been canceled. Accompanying this response are newly presented Claims 22-38, which essentially correspond to claims 2-18 which were subject to examination. Support for the amendments to the claims finds support through out the Specification, original claims and drawings.

Thus, claims 22-38 are now pending.

In the Office action of January 7, 2009, the Examiner has rejected Claims 19-21 under 35 U.S.C. 112, second paragraph as being omnibus claims. Claims 1-21 were rejected under 35 U.S.C. 103(a) as unpatentable over Pounds taken in view of Baker. Claims 1-21 were, also, rejected under 35 U.S.C. 103(a) as unpatentable over Pounds taken in view of Stephens et al.

Applicant herewith submits modifications to the claims which are believed to address each of the rejections raised. Applicant, respectfully, traverses all grounds of rejection to the extent they are applied to the currently pending claims for the reasons which follow as well as explanations for the modifications to the claims and drawings needed to address the objections raised.

### **Rejection under 35 U.S.C. 112, second paragraph:**

The Examiner has rejected claims 19-21 as failing to particularly point out and distinctly claiming the invention as being omnibus claims. Applicant would note that claims 19-21 have been canceled by the amendments which accompany this

response. The subject matter of claims 19-21 is not present in the newly presented claims. Therefore, it is believed that this rejection has been rendered moot.

### **Rejections under 35 USC 103(a):**

#### **The rejection based on Pound in view of Baker or Stephens et al.:**

At pages 2-3, the Examiner has set forth the basis for rejection of claims 1-21 as being unpatentable over Pound in view of either Baker or Stephens et al.

Essentially, the Examiner takes the position that Pound discloses a disk system similar to the claimed invention. However, the Examiner acknowledges that Pound does not disclose a disk with teeth. Baker and Stephens et al. are cited as showing that disks with teeth are known in art. The Examiner then concludes that it would have been obvious to use the disk with teeth as taught by either Baker or Stephens et al. in the device disclosed by Pound to obtain easier soil penetration.

Applicant would initially request consideration of the newly presented claims which have been amended to more particularly point out and distinctly claim the present invention. Specifically, the independent claims require that the disks of the claimed device be "rotatable". The device of Pound does not reasonably appear to disclose or suggest a rotatable disk.

Further the independent claims have been modified to emphasize that the claimed device is an apparatus for furrow opening in soil including a first and second disc, the first and second discs configured, in use, to incise and progressively widen a furrow in the soil by being angled relative to one another in a configuration whereby blades associated with the discs contact each other at a leading edge of the discs proximate the ground surface and progressively separate towards a trailing edge

thereof, thereby minimizing soil disturbance. While POUNDS may disclose two angled discs, and STEPHENS and BAKER disclose discs having teeth, applicant would note that the claimed invention is not merely a combination of these two features. The inventive step resides in the disc blades being superimposed and adapted to come together at a position just before entering the ground, and separate progressively thereafter to ensure the progressive widening of a furrow. We submit that this feature and the useful results the follow therefrom cannot be derived from the apparatus in the references relied upon by the Examiner or even a combination thereof.

Applicant would further note that US Patent No. 4,920,901 (POUNDS) discloses the use of two discs (22a and 22b) which are canted toward each other. The discs do not appear adapted to rotate, but are fixed so as to be dragged through the ground surface and displace the soil laterally as it cleaves through. The present invention teaches away from the use of such apparatus (refer to the preamble of the invention) because of the disturbance to the soil surface.

Similarly, US Patent No. 4,275,671 (BAKER) discloses the use of a blade in the form of a rotatable disc that includes a scalloped peripheral edge to facilitate the cutting and/or deflection of ground trash (column 2, line 1-5). The disclosed apparatus further includes a coulter member adapted to create a seed or fertilizer passage. The coulter is located adjacent to a single cutting blade and is drawn through the soil profile (column 2, line 43). The *BIOBLADE*, as this apparatus is called within the industry in Australia, has not been widely adopted. The main reason for its limited application is that the apparatus is expensive to operate as higher tractor power is

required to draw the coulter L shaped member (15a, 15b) through the soil profile. Furthermore, the soil acts on the L shaped members to force them onto the face of the cutting disc (10) in a similar fashion to disc brake callipers. This results in significant wear. The *BIOBLADE* also requires a significant down pressure and it is quite sensitive to soil strength.

In contrast, the apparatus of the present application, which is able to incise and progressively widen a furrow, has significant advantages over the apparatus disclosed in BAKER and POUNDS. The present invention is able to create a seed or fertilizer furrow by the action of the rotating discs (12, 14) having teeth which meet at the leading edge of the disc just above the ground level. Consequently, minimal downward force is required to create a viable furrow. Furthermore, wear of the apparatus is minimized because there is not a furrow member being drawn through the soil profile, rather the furrow is created by the action of the teeth.

Applicant would urge that neither the relationship of the disks or the advantage to be obtained from the specific orientation of the disks to one another is taught or suggested by the cited references.

Again, Applicant requests reconsideration of this rejection, for the following reasons:

1. There is no justification, in Pounds, Baker, and Stephens et al, or in any other prior art separate from the Applicant's disclosure, which suggest that these references be combined, much less combined in the manner proposed.

2. Even if these cited references were to be combined in the manner proposed by the examiner, the proposed combination would not show all of the novel physical features of the claims as amended.
3. These novel physical features of the claims produce new and unexpected results and hence are unobvious and patentable over these references.

Applicants respectfully request, if the claims are again rejected upon any combination of references, that the Examiner include an explanation, in accordance with M.P.E.P. § 706.02. Ex parte Clapp, 27 U.S.P.Q. 972 (P.O.B.A. 1985), and Ex parte Levingood, *supra*, a “factual basis to support his conclusion that would have been obvious” to make the combination.

The applicant would like to bring the attention of the examiner that in determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. As mentioned above, none of references cited by the Examiner alone or in combination would have made the whole invention obvious over the prior art. The Supreme Court’s decision in KSR International. Co. v. Teleflex, Inc., et al., 550 U.S.(2007) requires that an Examiner provide “some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.” (KSR Opinion at p. 14). An Examiner must “identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does,” (KSR Opinion at p. 15). And, the Examiner must make “explicit” this rationale of “the apparent reason to combine the known elements in the fashion claimed,” including a detailed explanation of “the effects of demands known to the design community or present in the marketplace” and “the background knowledge possessed by a person having ordinary skill in the art.” (KSR Opinion at p. 14). Anything less than such an explicit analysis may not be sufficient to support a *prima facie* case of obviousness. In January 2008 BPAI decision

entitled *In re Wada* and *Murphy* reversed a § 103 rejection because the Examiner did not explain where or how cited art taught or suggested all of the features of a claimed invention.

As noted above that the Office Action fails to specifically address even the expressly recited features of the pending independent and dependent claims. Under the Office's policy of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application. (MPEP §707.07(g)). It is submitted that the present application is not sufficiently informal, does not present an undue multiplicity of claims, or exhibit a misjoinder of inventions, so as to reasonably preclude a complete action on the merits. Thus, it is submitted that the Office's failure constitutes a failure to expeditiously provide the information necessary to resolve issues related to patentability that prevents the Applicant from, for example, presenting appropriate patentability arguments and/or rebuttal evidence. (See The Official Gazette Notice of November 7, 2003). Additionally, it is submitted that the Office's failure needlessly encourages piecemeal prosecution, which is to be avoided as much as possible. (MPEP §707.07(g)). Accordingly, in the event that the Office maintains the rejection of any of the independent and/or dependent claims, Applicant respectfully requests, in the interests of compact prosecution, that the Office apply art against each feature of each rejected independent and dependent claims, on the record, and with specificity sufficient to support a prima facie case of obviousness.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

It is well known that in order for any prior-art references themselves to be validly combined for use in a prior-art § 103 rejection, *the references themselves* (or some other prior art) must suggest that they be combined. E.g., as was stated in *In re Sernaker*, 217 U.S.P.Q. 1, 6 (C.A.F.C. 1983):

"[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantages to be derived from

combining their teachings.” That the suggestion to combine the references should not come from applicant was forcefully stated in *Orthopedic Equipment Co. v. United States*, 217 U.S.P.Q. 193, 199 (C.A.F.C. 1983):

“It is wrong to use the patent in suit [here the patent application] as a guide through the maze of prior art references, combining the right references in the right way to achieve the result of the claims in suit [here the claims pending]. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law [here the PTO].” As was further stated in *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 5 U.S.P.Q.2d 1434 (C.A.F.C. 1988), “[w]here prior-art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself

*... Something in the prior art must suggest the desirability and thus the obviousness of making the combination.”* [Emphasis supplied.]

In line with these decisions, the Board stated in *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (P.T.O.B.A.&I. 1993):

“In order to establish a *prima facie* case of obviousness, it is necessary for the examiner to present *evidence*, preferably in the form of some teaching, suggestion, incentive or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in the art *would have been led* to combine the relevant teachings of the, applied references in the proposed manner to arrive at the claimed invention. ...

That which is within the capabilities of one skilled in the art is not synonymous with obviousness. ... That one can *reconstruct* and/or explain the theoretical mechanism of an invention by means of logic and sound scientific reasoning does not afford the basis for an obviousness conclusion unless that logic and reasoning also supplies sufficient impetus to have led one of the ordinary skill in the art to combine the teachings of the references to make the claimed invention.... Our reviewing courts have often advised the Patent and Trademark Office that it can satisfy the burden of establishing a *prima facie* case of obviousness only by showing some objective teaching in either the prior art, or knowledge generally available to one of ordinary skill

in the art, that ‘would lead’ that individual ‘to combine the relevant teachings of the references.’ ... Accordingly, an examiner cannot establish obviousness by locating references which describe various aspects of a patent applicant’s invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done.”

Therefore, applicant requests reconsideration and withdrawal of the two rejections under 35 U.S.C. 103(a) to the extent it might be applied to the newly presented claims.

## **Conclusion**

In conclusion, applicant has presented arguments and amendments relating to both the grounds of rejection set forth in the Office action of January 7, 2009. Applicant, respectfully, requests that the Examiner reconsider all rejections and find all claims allowable.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17 or credit any overpayment, to deposit account No. 503321. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, or otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 503321.

Respectfully submitted,

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